

Amendments to the Specification:

Insert, before the first line on page 1, the sentence:

This application is a divisional of U.S. Patent Application No. 09/907,188, filed July 17, 2001.

Specification at page 2, line 20:

~~At the~~ In screen printing, since the squeegee is horizontally moved while it is urged to the mask plate, an external force is applied to the mask plate so that the mask plate is pulled by the squeegee in the lateral direction. This external force repeatedly works ~~to~~ on the mask plate at every printing operation, which could loosen the mounting condition of the mask plate or extend the mask plate. As a result, even if the substrate is correctly positioned, the movement of the squeegee at every printing deviates the mask plate relatively from the substrate, and a printing position cannot be exactly maintained.

Insert before the title Detailed Description of the Invention on page 4, the sentence:

The entire disclosure of U.S. Patent Application No. 09/907,188, filed July 17, 2001, is expressly incorporated by reference herein.

Specification at page 9, line 4:

Device 20 is moved by the moving means with respect to substrate 6 and mask plate 12, whereby the shapes of substrate 6 and mask plate 12 in any ranges can be measured from ~~their~~ above in a three-dimensional way. Then the detection data obtained is processed, thereby detecting electrode 6a (features of substrate 6), pattern holes 12a (features of mask plate 12) and the holes for detecting the position. As a result, a horizontal position of mask plate 12 can be detected.

Specification at page 9, line 11:

In other words, laser measuring device 20 functions as a mask-position-measuring means for detecting the horizontal position of mask plate 12. Devices

other than laser measuring device 20 (three-dimensional measuring means) can be used as mask-position-measuring means, e.g., features such as recognition marks provided on mask plate 12 can be shot by a camera then the positions of the features can be recognized through image-processing.

Specification at page 9, line 17:

Further, substrate 6 ~~undergone a~~ undergoing screen printing is ~~taken regarded~~ as a measuring object, and laser measuring device 20 measures substrate 6 in a three-dimensional way, thereby detecting a shape of cream solder 9 printed on substrate 6 in a three-dimensional way. As a result, the print can be inspected, i.e., a position and a printed amount of solder 9 are determined whether or not they are acceptable.

Specification at page 9, line 23:

When substrate 6 is positioned with respect to mask plate 12, i.e., substrate 6 is positioned to mask plate 12 in the horizontal direction and placed under and in contact with the lower face of mask plate 12, the three-dimensional measuring is carried out from ~~the above of~~ mask plate 12. As a result, a positioned status can be detected, which is hereinafter described with reference to Figs. 6, 7.

Specification at page 11, line 5:

When pattern hole 12a is filled excessively with cream solder 9, as shown in Fig. 10B, surplus cream solder 9 overflows pattern hole 12a. In this case, measuring line Lb reflects the surface of solder 9 and becomes different from the normal height h0.

Specification at page 13, line 21:

Next, the preparation of the printing conditions is described. Fig. 9 shows data content of printing-condition-library. In this library, a combination of the parameters (squeegeeing speed, print pressure, releasing speed, and releasing distance which indicates a relative moving distance) is assigned to respective couples of a typical dimension of an electrode (e.g. width of the electrode) and a

typical dimension of the screen mask (e.g. thickness of the mask plate) where pattern holes are provided. These parameters takes different values depending on the physical properties of cream solder 9.

Specification at page 17, line 8:

As discussed above, the second embodiment of the screen printing method includes the following steps: When substrate 6 is positioned to mask plate 12, the horizontal position of mask plate 12 is measured, thereby obtaining the positional deviation of mask plate 12 due to the printing action. The print position data at actual printing is corrected by that deviation. As a result, the deviations due to deformation of mask plate 12 over the time and looseness of mounting the mask plate 12 can be corrected. Quality print without any print deviation is thus obtainable.